MILTECH™ 914

Military Grade Gigabit Ethernet Switch On Board (GESoB)

One of the most exciting advancement in technology over the last decade has been unmanned vehicles including:

- Unmanned aerial vehicles (UAVs) or Drones
- Land autonomous vehicles (UGVs)
- Robots
- Other unmanned support vehicles

These vehicles must be agile, compact and highly intelligent. In order to support this sophisticated intelligence, these platforms may have to carry and connect a variety of Ethernet-based devices including computers, sensors, and targeting systems - all in compact platforms that must operate in extreme environmental conditions.

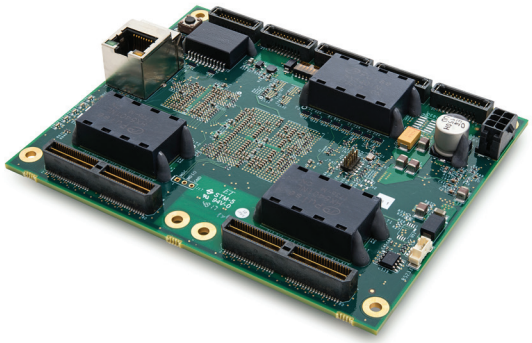
The MILTECH914 is cost-effective, ultra-compact board-level Ethernet switching solution that is the most compact solution available on the market today. This board-level switch is ideal for integrating in to system level solutions being developed with size, weight, power and cost (SWaP-C) at top of mind .

Advanced network features, never before found in a package of this size, include switching protocols, virtual LANS (VLANS), traffic prioritization (QoS), and bandwidth aggregation are standard.

The MILTECH914's gigabit speeds and 9-16VDC power make it instantly compatible with any network device and power systems.

SPECIFICATIONS

ETHERNET PORTS	• Managed 14 x switched 10/100 /1000 ports
NETWORKING	• Spanning Tree (802.1d), RSTP (802.1w) and multiple Spanning Tree (802.1S) for fast recovery rings • Security via Radius Authentication 802.1x, Port Security, Port Mirroring • Multicasting (IGMP Snooping), GARP, GMRP, and GVRP Broadcasting and flooding Control up to 8K Groups. • 802.1q Tagged based VLAN up to 4K VLAN groups. • QoS Multi-Layer Classifier, 802.1p, ToS/DSCP traffic classification. WFQ, Strict Queuing. • Bridge support for Q-in-Q. • L3 static routing • Link Aggregation 802.3AD. • WEB, CLI, Telnet Management. • Rmirror* • Port Protection: 1+1 port protection, 1:1 port protection, 1:N port protection* • G.8032 ring protection* • DHCP option 82 relay* • L2CP tunneling* • Protocol-based VLAN* • 1588v2 PTP with two-step clock* *Available in part number 1-914-100
CONNECTORS	• 8 LAN Channels - 2 x Samtec QTE-040-02-L-D-A • 5 LAN Channels - 5 x Samtec TFM-110-02-L-D-WT • 1 LAN Channels - ERNI 203342/3 • 1 Console - Molex 53398-0371 • 1 Power - Molex 43045-0612
STANDARDS	• MIL-STD-461E, MIL-STD-810F GM, IP68 when installed in an appropriate chassis



NIST 800-171 Compliant | AS9100D CERTIFIED ISO 9001

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SPECIFICATIONS

PERFORMANCE	• 26.8 Mpps wire speed forwarding rate • 20 Gbps maximum forwarding bandwidth • 8K MAC Address
STANDARDS COMPLIANCE	• IEEE 802.1x MAC based Authentication • IEEE 802.1Q Vlan Tagging • IEEE 802.1P QoS • IEEE 802.1S Multiple STP • IEEE 802.1W Rapid STP • IEEE 802.1AD Link Aggregation • IEEE 802.1X
POWER	• Voltage Input: 9-16VDC • Power Consumption: 14W Typical
ELECTROMAGNETIC	• MIL-STD-461E Electromagnetic compatibility • CE-102, CS-114, CS-115, CS-116, RE-102, RS-103 (when installed in an appropriate chassis)
ENVIRONMENTAL	• MILSTD-810F/G/GM: • Random vibration (514.5I), Bench Handling (516.6VI), High Temp.(501.5I,II), Low Temp.(502.5I), Humidity (507.5II), Air Pressure (500.5I,II), Blowing Rain (506.5I), Immersion (512.5I), Salt Atmosphere (509.5I), • Blowing Dust (510.5I), Loose Cargo Vibration (514.6II), Wind Analysis (when installed in an appropriate chassis)
PHYSICAL	• Dimensions: 125mm (L) x 100mm (W) x 20(H) • Dimensions: 4.92” (L) x 3.93” (W) x 0.79” (H)
INSTALLATION	• 6 x mounting holes for board to board mounting
COOLING	• No Moving Parts. Passive Cooling.
OPERATING TEMP	• -45°C to +85°C (-49°F to +185°F) Cold Start-Up
STORAGE TEMP	• -45°C to +85°C (-49°F to +185°F)

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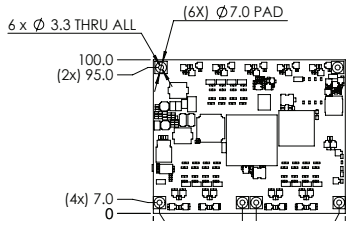

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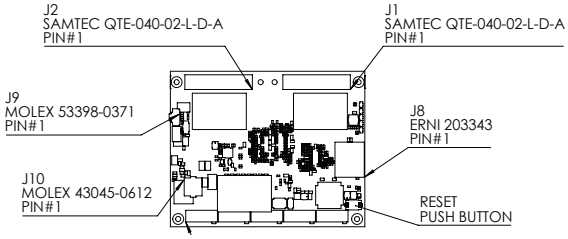

ORDERING INFORMATION

PART NUMBER	DESCRIPTION
1-914-000	Manage Military Grade Gigabit Ethernet Switch, 14 x 10/100/1000TX
1-914-100	Enhanced Manage Military Grade Gigabit Ethernet Switch, 14 x 10/100/1000TX
1-CP914-000	Cooling base plate for MILTECH914